Blood Group Linked to Rheumatic Fever

A statistical association has been found between persons of a particular blood type and rheumatic fever, an article in the February 17 *Journal of the American Medical Association* said.

Drs. Joseph A. Buckwalter and Gerald V. Tweed, Iowa City, Iowa, reported findings that indicated persons of NN blood type, a subtype of the MN blood group, had an "increased liability" to the disease.

Previous investigations had failed to turn up any convincing evidence of an association of MN blood groups to disease, they said.

An increased incidence of rheumatic fever also was found among persons with one subtype (R^2r) of the Rh blood group, they said.

The results of a four and one-half year study also justify the conclusion that there is an association between Rh blood groups and stomach cancer, the authors said.

The Rh blood-group effect in stomach cancer "seems to be a very strong one, since it is apparent in the relatively small group of 170 patients," they said. "However," they added, "the nature of the association is far from clear."

The incidence of stomach cancer was reduced significantly in persons with two subtypes (R^2r, R^1R^1) of the Rh blood group but increased in persons with a third subtype (R^1R^2), they said.

Statistically significant evidence of a tendency of persons of the R^2r blood group to develop duodenal and stomach ulcers also was found, they said.

The study was conducted among patients at the University of Iowa or the Iowa City Veterans Administration Hospitals. Some 3,641 patients with either ulcers, stomach cancer, rheumatic fever of diabetes were compared with 2,186 disease-free volunteers.

Other studies have indicated that associations exist between certain diseases and the ABO blood groups, the third large classification of blood types.

"Until the nature of the associations between the blood groups and disease is better understood, it is impossible to assess with confidence the relevance and importance of the findings of these investigations to current [scientific] concepts . . . or their implications in clinical medicine," the authors said.

Drs. Buckwalter and Tweed are affiliated with the department of surgery, College of Medicine, University of Iowa.

HUMAN SYNOVIAL-CELL CULTURE: USE OF NEW METHOD IN STUDY OF RHEUMATOID ARTHRITIS—J. R. E. Fraser and K. J. Catt. Lancet—Vol. 2:1437 (Dec. 30) 1961.

A simple method of dispersing synovial cells was developed for tissue culture, biochemical and immunologic study of joint disease. Cell culture by this technique is briefly described, with a preliminary account of the toxic effects of rheumatoid serums on human synovial-cell cultures.